



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,113	06/06/2001	Jurgen Baer	033275-226	7895

21839 7590 09/11/2002

BURNS DOANE SWECKER & MATHIS L L P
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

AGUIRRECHEA, JAYDI A

ART UNIT	PAPER NUMBER
----------	--------------

2834

DATE MAILED: 09/11/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,113

Applicant(s)

BAER ET AL.

Examiner

Jaydi A. Aguirrechea

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 5-13 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5, 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 2834

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the ring gap segments, and the end spacer plates must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 33 and 34. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 7-8, 10 and 13, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim is generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

The examiner notes that the following phrases render the claims vague, indefinite and/or ambiguous. Recitation, in

Claim 1:

Art Unit: 2834

“...into the ring gap segments are avoided by designing the sections of the end spacer plates...” The purpose of the invention is to avoid separations of the cooling gas stream, how does the design avoid that separation?

“...in a manner that is advantageous with respect to the flow...” What feature of the invention provides the advantage?

“...covered by one each annular cap plate...” It is not clear whether it is an additional annular cap plate or covered by one annular cap plate; however, based on the drawings it is assumed that the windings are covered by an annular cap plate.

Claim 5:

“...wherein one each additional gas guidance segment...” The terminology “gas guidance segment” was not used before, so the claim lacks antecedent basis. In this case the examiner assumes that a gas guidance segment, as disclosed in the specification, for guiding the gas stream is provided.

Claim 7:

“...with respect to flow technology” The specification does not explain what the inventors mean by flow technology.

Claim 8:

“... segment are designed so that cooling gas is pressed...” How was the section of the end plates and the gas guidance segment designed in order to get the desired outcome?

Claim 10:

“...the gas guidance segment is designed at its edge, that is, in the rear in the rotation direction of the rotor, in such a way that the cooling gas stream flowing through the gap is added

Art Unit: 2834

to the cooling gas stream flowing into the adjoining ring gap segment essentially without a transition”.

Claim 13:

“...wherein the section of the end spacer plate projects into the ring gap, has a greater thickness than the remaining part of the end spacer plate and projects with its side facing the cooling gas stream into the space below the cap plate”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (Figures 1A and 1B of Applicant's disclosure) in view of Willyoung (US 2712085).

Figures 1A and 1B teach a turbo generator comprising:

a rotor (10) with direct gas cooling, being provided with a rotor winding (14) arranged around a central rotor body,

said rotor winding being on the front sides covered by one annular cap plate (19), and

the cooling gas for cooling the rotor flows into ring gap segments between the cap plate and the rotor body,

Art Unit: 2834

whereby the ring gap segments are bordered, when seen in circumferential direction, on the sides in each case by the section of an end spacer plate(16) provided between the cap plate and the rotor winding,

whereby this section is projecting into the ring gap.

However, Figures 1A/1B of applicant's disclosure fail to disclose the design of the end spacer plates.

Willyoung discloses an end spacer plate (9) for the purpose of supporting the end portions of the rotor windings.

With regards to claim 2 and 3, Willyoung discloses the curved side edges (See figure 1 reference 9) of the sections of the end spacer plates are provided with a bevel.

With regards to claim 4, Willyoung discloses the end spacer plates closing off a warm gas chamber (See figure 1 reference 8, 9).

It would have been obvious to one skilled in the art at the time the invention was made to use the spacer plate disclosed by Willyoung on the turbo generator disclosed by applicant's admitted prior art for the purpose of supporting the end portions of the rotor windings.

Allowable Subject Matter

Claims 5-13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The examiner notes that the Prior Art of Record teaches the machine having end spacer plates for the purpose of supporting the end portions of the rotor windings as claimed by the applicant.

Art Unit: 2834

The prior art does not teach a turbo generator having a gas guidance segment, that guides the cooling gas stream around the section, provided in the flow direction upstream from the sections of the end spacer plates as claimed in claim 5.

Regarding claims 6-12, claims 6-12 are allowed for the reasons given in claim 5 because they depend from claim 5.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaydi A. Aguirrechea whose telephone number is 703-305-2277. The examiner can normally be reached on M-Th 9-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-1341 for regular communications and 703-305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

jaa
September 5, 2002


NESTOR RAMIREZ
SUPERVISOR, PATENT EXAMINER
TECHNICAL CENTER 2834